Set Name side by side	Query	Hit Count	Set Name result set
	DB=USPT,PGPB,JPAB,EPAB,DWPI,TDBD; PLUR=YES; OP=AND		
L10	L9 and ((liver or hepatic) adj (cell transplantation))	30	L10
L9	L5 and (treatment or therapy)	615	L9
L8	L7 and (human)	32	L8
L7	L6 and ((alpha fetoprotein) or (albumin))	32	L7
L6	((liver or hepatic) adj progenitor) or hepatoblast	44	L6
L5	L3 and ((alpha fetoprotein) or (albumin))	621	L5
L4	Lw same (human liver)	0	L4
L3	L2 and (human liver)	1019	L3
L2	(hepatic or hematopoietic or hemopoietic or mesenchymal) adj (progenitor or (stem cell))	1960	L2
L1	Reid-lola-M$.in.	11	L1

END OF SEARCH HISTORY

...of a putative stem-like cell in liver together with the sticity exhibited by some hepatocytes and biliary epithelial cells in various forms of severe *hepatic* and biliary tract injury can have important implications for carcinogenesis and aberrant regenerative responses in liver. In addition, novel in vivo and cell culture models...
MEDICAL DESCRIPTORS:
animal tissue; bile duct; histology; human; human tissue; nonhuman; rat; *review*
?ds

Set	Items	Description
S1	349	(LIVER OR HEPATIC) (W) (PROGENITOR OR (STEM (W) CELL))
S2	56	(HEPATOBLAST)
S3	398	S1 OR S2
S4	257	S3 AND (HEPATIC OR MESENCHYMAL OR HEMATOPOIETIC OR HEMOPOIETIC)
S5	24	S4 AND (ISOLATION OR PURIFICATION)
S6	19	RD (unique items)
S7	36	S3 AND (CELL (W) TRANSPLANTATION)
S8	19	S7 AND (TREATMENT OR THERAPY)
S9	12	RD (unique items)
S10	24	(S3 OR S4) AND REVIEW
S11	17	RD (unique items)
S12	4	S11 AND ((HEPATIC OR LIVER) (W) (DISEASE OR DISORDER))

?logoff
24mar02 14:25:43 User259876 Session D329.2
$3.70 1.157 DialUnits File155
$2.52 12 Type(s) in Format 3
$2.52 12 Types
$6.22 Estimated cost File155
$5.83 1.041 DialUnits File5
$14.00 8 Type(s) in Format 3
$14.00 8 Types
$19.83 Estimated cost File5
$15.23 1.692 DialUnits File73
$37.50 15 Type(s) in Format 3
$37.50 15 Types
$52.73 Estimated cost File73
OneSearch, 3 files, 3.889 DialUnits FileOS
$0.53 TYMNET
$79.31 Estimated cost this search
$79.67 Estimated total session cost 3.988 DialUnits

Status: Signed Off. (9 minutes)

Status: Path 1 of [Dialog Information Services via Modem]

Status: Initializing TCP/IP using (UseTelnetProto 1 ServiceID pto-dialog)
Trying 3106900061...Open

DIALOG INFORMATION SERVICES
PLEASE LOGON:
 ******** HHHHHHHH SSSSSSSS?
Status: Signing onto Dialog
 ****
ENTER PASSWORD:
 ******** HHHHHHHH SSSSSSSS? ********
Welcome to DIALOG
Status: Connected

Dialog level 02.02.11D

Last logoff: 23mar02 13:14:13
Logon file001 24mar02 14:17:41
           *** ANNOUNCEMENT ***
                    ***
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(below) for individual file numbers.

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options on Dialog. See HELP CONNECT for
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See HELP SOURCE1 for more information.
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--Important news for public and academic
libraries. See HELP LIBRARY for more information.
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For information about the access to file 43 please see Help News43.
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***Dialog NewsRoom - 2001 Archive (File 994)
***Dialog NewsRoom - 2000 Archive (File 995)
***AGROProjects (File 235)
***TRADEMARKSCAN-Japan (File 669)
                    ***
UPDATING RESUMED
***Delphes European Business (File 481)
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***Population Demographics (File 581)
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***Kompass Western Europe (590)
***D&B - Dun's Market Identifiers (516)

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***Washington Post (File 146)
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***Court Filings (File 793)
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***Publishers, Distributors & Wholesalers of the U.S. (File 450)
***State Tax Today (File 791)

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***Tax Notes Today (File    )
***Worldwide Tax Daily (File 792)

***New document supplier***
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   broad spectrum of news wires.

     >>> Enter BEGIN HOMEBASE for Dialog Announcements <<<
     >>>    of new databases, price changes, etc.      <<<
                    ****
KWIC is set to 50.
HILIGHT set on as '*'
****                                    ****

File   1:ERIC  1966-2002/Mar 02
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      Set  Items  Description
      ---  -----  -----------
Cost is in DialUnits
?b 155, 5, 73
       24mar02 14:17:53 User259876 Session D329.1
            $0.35    0.099 DialUnits File1
     $0.35  Estimated cost File1
     $0.01  TYMNET
     $0.36  Estimated cost this search
     $0.36  Estimated total session cost   0.099 DialUnits


SYSTEM:OS  - DIALOG OneSearch
  File 155:MEDLINE(R)  1966-2002/Mar W2
  File   5:Biosis Previews(R)  1969-2002/Mar W3
         (c) 2002 BIOSIS
  File  73:EMBASE  1974-2002/Mar W3
         (c) 2002 Elsevier Science B.V.
*File  73: For information about Explode feature please
see Help News73.

      Set  Items  Description
      ---  -----  -----------
?s (liver or hepatic) (w) (progenitor or (stem (w) cell))
         1348812  LIVER
          373314  HEPATIC
           54803  PROGENITOR
          276646  STEM
         5658142  CELL
           77496  STEM(W)CELL
      S1     349  (LIVER OR HEPATIC) (W) (PROGENITOR OR (STEM (W) CELL))
?s (hepatoblast)
      S2      56  (HEPATOBLAST)
?s s1 or s2
             349  S1
              56  S2
      S3     398  S1 OR S2
?s s3 and (hepatic or mesenchymal or hematopoietic or hemopoietic)
             398  S3
          373314  HEPATIC
           36472  MESENCHYMAL
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          104909  HEMATOPOIETIC
          278423  HEMOPOIETIC
      S4     257  S3 AND (HEPATIC OR MESENCHYMAL OR HEMATOPOIETIC OR
                  HEMOPOIETIC)
?s s4 and (isolation or purification)
             257  S4
          816691  ISOLATION
          677865  PURIFICATION
      S5      24  S4 AND (ISOLATION OR PURIFICATION)
?rd
...completed examining records
      S6      19  RD (unique items)
?t s6/3,k/all
```

6/3,K/1 (Item 1 from file: 155)
DIALOG(R)File 155:MEDLINE(R)

11702528 21256547 PMID: 11358043

***Hepatic* stem cells: a review.**

Vessey CJ; de la Hall PM

Department of Anatomical Pathology, University of Cape Town, South Africa.

Pathology (England) May 2001, 33 (2) p130-41, ISSN 0031-3025 Journal Code: OTA

Languages: ENGLISH

Document type: Journal Article; Review; Review, Academic

Record type: Completed

***Hepatic* stem cells: a review.**

The existence of a *liver* *stem* *cell* population has only gained credence recently, following the results of animal experiments. These cells are thought to reside in the terminal bile ductules (canals of...

...L-PK, albumin and alpha-fetoprotein. There is also growing evidence that bone marrow stem cells may contribute to liver regeneration. The possible involvement of *hepatic* stem cells in the development of dysplastic nodules, hepatocellular carcinoma and cholangiocarcinoma has been suggested but remains highly controversial. Oval cell *isolation* and culture techniques, together with stem cell transplantation strategies, may in the future provide novel treatments for individuals with inherited and acquired *hepatic* disorders.

6/3,K/2 (Item 2 from file: 155)
DIALOG(R)File 155:MEDLINE(R)

11131481 21017687 PMID: 11144968

Clonogenic colony-forming ability of flow cytometrically isolated *hepatic* *progenitor* cells in the murine fetal liver.

Taniguchi H; Kondo R; Suzuki A; Zheng YW; Takada Y; Fukunaga K; Seino K; Yuzawa K; Otsuka M; Fukao K; Nakauchi H

Department of Surgery, Institute of Clonical Medicine, University of Tsukuba, Ibaraki, Japan. rtanigu@igaku.md.tsukuba.ac.jp

Cell transplantation (United States) Sep-Oct 2000, 9 (5) p697-700, ISSN 0963-6897 Journal Code: B02

Languages: ENGLISH

Document type: Evaluation Studies; Journal Article

Record type: Completed

Clonogenic colony-forming ability of flow cytometrically isolated *hepatic* *progenitor* cells in the murine fetal liver.

Stem cells are defined as cells having multilineage differentiation potential and self-renewal capability. *Hepatic* stem cells have aroused considerable interest not only because of their developmental importance but also for their therapeutic potential. However, their presence in the liver has not yet been demonstrated. With the use of a

fluorescence-activated cell sorter (FACS) and monoclonal antibodies, we attempted to ascertain whether *hepatic* stem cells are present in the murine fetal liver. For this purpose, we optimized a cell *isolation* technique for FACS sorting of fetal liver cells. When isolated CD45 TER119 cells (the non-blood cell fraction in the fetal liver) were tested for their clonogenic colony-forming ability, mechanical dissociation (pipetting) was the most suitable cell *isolation* technique for FACS sorting. We confirmed that these colonies contained not only cells expressing hepatocyte markers but also cells expressing cholangiocyte markers. To identify *hepatic* stem cells, studies must focus on CD45TER119- cells in the murine fetal liver.

6/3,K/3 (Item 3 from file: 155)
DIALOG(R)File 155:MEDLINE(R)

09484901 94299642 PMID: 8027180
Expression of *hepatic* transcription factors during liver development and oval cell differentiation.
Nagy P; Bisgaard HC; Thorgeirsson SS
Laboratory of Experimental Carcinogenesis, National Cancer Institute, Bethesda, Maryland 20892-0037.
Journal of cell biology (UNITED STATES) Jul 1994, 126 (1) p223-33, ISSN 0021-9525 Journal Code: HMV
Languages: ENGLISH
Document type: Journal Article
Record type: Completed

Expression of *hepatic* transcription factors during liver development and oval cell differentiation.
The oval cells are thought to be the progeny of a *liver* *stem* *cell* compartment and strong evidence now exists indicating that these cells can participate in liver regeneration by differentiating into different *hepatic* lineages. To better understand the regulation of this process we have studied the expression of liver-enriched transcriptional factors (HNF1 alpha and HNF1 beta, HNF3...
... DBP) in an experimental model of oval cell proliferation and differentiation and compared the expression of these factors to that observed during late stages of *hepatic* ontogenesis. The steady-state mRNA levels of four (HNF1 alpha, HNF3 alpha, HNF4, and C/EBP beta) "liver-enriched" transcriptional factors gradually decrease during the...
; Blotting, Northern; CCAAT-Enhancer-Binding Proteins; Cell Differentiation; Cell Division; DNA-Binding Proteins--genetics--GE; DNA-Binding Proteins--*isolation* and *purification*--IP; In Situ Hybridization; Liver--anatomy and histology--AH; Liver--embryology--EM; Liver Regeneration; Nuclear Proteins--genetics--GE; Nuclear Proteins--*isolation* and *purification*--IP; Rats; Stem Cells--cytology--CY; Transcription Factors--genetics--GE; Transcription Factors--*isolation* and *purification*--IP; Up-Regulation (Physiology)

6/3,K/4 (Item 4 from file: 155)
DIALOG(R)File 155:MEDLINE(R)

08930622 96295654 PMID: 8679101
Stem cells from bone marrow, umbilical cord blood and peripheral blood for clinical application: current status and future application.
Lu L; Shen RN; Broxmeyer HE
Department of Medicine (Hematology/Oncology), Indiana University School of Medicine, Indianapolis 46202-5121, USA.
Critical reviews in oncology/hematology (IRELAND) Mar 1996, 22 (2) p61-78, ISSN 1040-8428 Journal Code: AGO
Contract/Grant No.: R01 CA HL46549, CA, NCI; R01 HL 49202, HL, NHLBI; R37 CA 36464, CA, NCI
Languages: ENGLISH
Document type: Journal Article; Review; Review, Academic

Record type: Completed

...screening of new immunomodulating agents which improve engraftment and augment hemopoiesis are intense areas of investigation. To this end there has clearly been progress in *purification* and characterization of human stem cells from different tissue sources. Discussed in this review are: (a) stem cell *purification*, characterization and ex vivo expansion; (b) bone marrow stem cell transplantation; (c) cord blood stem cell transplantation; (d) peripheral blood stem cell transplantation; (e) fetal *liver* *stem* *cell* transplantation; (f) in utero stem cell transplantation; and (g) evaluation of the capacity of stem cells to serve as targets for gene therapy.

Descriptors: Blood Cells--cytology--CY; *Bone Marrow--cytology--CY; *Fetal Blood--cytology--CY; **Hematopoietic* Stem Cells--cytology--CY

6/3,K/5 (Item 5 from file: 155)
DIALOG(R)File 155:MEDLINE(R)

08398908 94245825 PMID: 7514611

Modulation of keratin 14 and alpha-fetoprotein expression during *hepatic* oval cell proliferation and liver regeneration.

Bisgaard HC; Nagy P; Ton PT; Hu Z; Thorgeirsson SS

Laboratory of Experimental Carcinogenesis, National Cancer Institute, National Institutes of Health, Bethesda, Maryland 20892.

Journal of cellular physiology (UNITED STATES) Jun 1994, 159 (3) p475-84, ISSN 0021-9541 Journal Code: HNB

Languages: ENGLISH

Document type: Journal Article

Record type: Completed

Modulation of keratin 14 and alpha-fetoprotein expression during *hepatic* oval cell proliferation and liver regeneration.

Keratin 14 (K14) expression has recently been demonstrated in cell lines of non-parenchymal *hepatic* origin (Bisgaard et al., 1993, Mol. Carcinog., 7:60-66; Bisgaard et al., 1991, J. Cell. Physiol., 147:333-343). These cell lines are thought...

... utilized an in vitro model in which spontaneous transformation of rat liver epithelial (RLE) cells appeared to mimic the process of early differentiation along the *hepatic* lineage in vivo. We demonstrated that undifferentiated RLE cells at a late passage expressed K14 and vimentin, whereas transformation and differentiation to *hepatoblast*-like progeny resulted in an abrogation of K14 and vimentin expression and an induction of K18 and AFP. We propose that K14 and AFP are...

...; Cells, Cultured; Gene Expression Regulation--drug effects--DE; Hepatectomy; In Situ Hybridization; Liver--cytology--CY; Liver --drug effects--DE; Poly A--biosynthesis--BI; Poly A--*isolation* and *purification*--IP; RNA--biosynthesis--BI; RNA--*isolation* and *purification*--IP; RNA, Messenger--analysis--AN; Rats; Rats, Inbred F344; Transcription, Genetic--drug effects--DE; Vimentin--biosynthesis--BI

6/3,K/6 (Item 1 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)

13512343 BIOSIS NO.: 200200141164

***Hepatic* *progenitor* cells isolated from adult mouse liver.**

AUTHOR: Azuma Hisaya(a); Hirose Tetsuro; Fujii Hideaki; Oe Shoshiro; Yasuchika Kentaro; Fujikawa Takahisa; Yamaoka Yoshio

AUTHOR ADDRESS: (a)Kyoto University Graduate School of Medicine, Kyoto** Japan

JOURNAL: Hepatology 34 (4 Pt. 2):p502A October, 2001

MEDIUM: print

CONFERENCE/MEETING: 52nd Annual Meeting and Postgraduate Courses of the

American Association for Study of Liver Diseases Dall[redacted] Texas, USA
November 09-13, 2001
ISSN: 0270-9139
RECORD TYPE: Citation
LANGUAGE: English

***Hepatic* *progenitor* cells isolated from adult mouse liver.**
DESCRIPTORS:
ORGANISMS: PARTS ETC: *hepatic* *progenitor* cells...
METHODS & EQUIPMENT: cell *isolation*--...

...cell *isolation* method

6/3,K/7 (Item 2 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)

13512342 BIOSIS NO.: 200200141163
Green fluorescent protein (GFP)-transgenic mouse as a powerful tool in *purification* of *hepatic* *progenitor* cells from adult mouse liver.
AUTHOR: Fujikawa Takahisa(a); Hirose Tetsuro(a); Fujii Hideaki(a); Oe Shoshiro(a); Yasuchika Kentaro(a); Azuma Hisaya(a); Yamaoka Yoshio(a)
AUTHOR ADDRESS: (a)Kyoto University, Kyoto**Japan
JOURNAL: Hepatology 34 (4 Pt. 2):p502A October, 2001
MEDIUM: print
CONFERENCE/MEETING: 52nd Annual Meeting and Postgraduate Courses of the American Association for the Study of Liver Diseases Dallas, Texas, USA November 09-13, 2001
ISSN: 0270-9139
RECORD TYPE: Citation
LANGUAGE: English

Green fluorescent protein (GFP)-transgenic mouse as a powerful tool in *purification* of *hepatic* *progenitor* cells from adult mouse liver.
DESCRIPTORS:
ORGANISMS: PARTS ETC: *hepatic* *progenitor* cells...

6/3,K/8 (Item 3 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)

13511938 BIOSIS NO.: 200200140759
Efficient gene transfer system for human fetal *hepatic* *progenitor* cells utilizing developed new *isolation* and culture system.
AUTHOR: Yasuchika Kentaro(a); Hirose Tetsuro; Fujikawa Takahisa; Fujii Hideaki; Oe Shoshiro; Azuma Hisaya; Ikai Iwao; Yamaoka Yoshio
AUTHOR ADDRESS: (a)Kyoto University Graduate School of Medicine, Kyoto** Japan
JOURNAL: Hepatology 34 (4 Pt. 2):p381A October, 2001
MEDIUM: print
CONFERENCE/MEETING: 52nd Annual Meeting and Postgra[redacted] Courses of the American Association for the Study of Liver Disease[redacted]llas, Texas, USA November 09-13, 2001
ISSN: 0270-9139
RECORD TYPE: Citation
LANGUAGE: English

Efficient gene transfer system for human fetal *hepatic* *progenitor* cells utilizing developed new *isolation* and culture system.
DESCRIPTORS:
ORGANISMS: PARTS ETC: fetal *hepatic* *progenitor* cells...
MISCELLANEOUS TERMS: ...*isolation* system

6/3,K/9 (Item 4 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)
(c) 2002 BIOSIS. All rts. reserv.

13215324 BIOSIS NO.: 200100422473
Prospective identification and enrichment of self-renewing multipotential *hepatic* stem cells by flow cytometric cell sorting.
AUTHOR: Suzuki Atsushi(a); Zheng Yun-wen(a); Kaneko Shin; Onodera Masafumi; Fukao Katashi(a); Nakauchi Hiromitsu; Taniguchi Hideki(a)
AUTHOR ADDRESS: (a)Dept. Surgery, Tsukuba Univ., Tsukuba**Japan
JOURNAL: Development Growth & Differentiation 43 (Supplement):pS22 July, 2001
MEDIUM: print
CONFERENCE/MEETING: 14th International Congress of Developmental biology Kyoto, Japan July 08-12, 2001
ISSN: 0012-1592
RECORD TYPE: Citation
LANGUAGE: English
SUMMARY LANGUAGE: English

Prospective identification and enrichment of self-renewing multipotential *hepatic* stem cells by flow cytometric cell sorting.
DESCRIPTORS:
...ORGANISMS: PARTS ETC: *hepatic* *stem* *cell*--
...METHODS & EQUIPMENT: *purification* method

6/3,K/10 (Item 5 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)
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13052624 BIOSIS NO.: 200100259773
Prospective identification and *purification* of multi-potent *hepatic* stem cells.
AUTHOR: Suzuki A(a); Taniguchi H(a); Zheng Y W(a); Fukao K(a); Nakauchi H
AUTHOR ADDRESS: (a)Dept. of surgery, Inst. of Clinical Med., Univ. of Tsukuba, Tsukuba**Japan
JOURNAL: Zoological Science (Tokyo) 17 (Supplement):p83 December, 2000
MEDIUM: print
CONFERENCE/MEETING: Seventy-First Annual Meeting of the Zoological Society of Japan Yamagata, Japan September 21-23, 2000
ISSN: 0289-0003
RECORD TYPE: Citation
LANGUAGE: English
SUMMARY LANGUAGE: English

Prospective identification and *purification* of multi-potent *hepatic* stem cells.
DESCRIPTORS:
ORGANISMS: PARTS ETC: *hepatic* *stem* *cell*--
METHODS & EQUIPMENT: cell *purification*--*purification* method

6/3,K/11 (Item 6 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)
(c) 2002 BIOSIS. All rts. reserv.

12827893 BIOSIS NO.: 200100035042
Purified *hematopoietic* stem cells can differentiate into hepatocytes in vivo.
AUTHOR: Lagasse Eric(a); Connors Heather; Al-Dhalimy Muhsen; Reitsma Michael; Dohse Monika; Osborne Linda; Wang Xin; Finegold Milton; Weissman Irving L; Grompe Markus
AUTHOR ADDRESS: (a)StemCells, 525 Del Rey Avenue, Suite C, Sunnyvale, CA, 94085: elagasse@stemcell.net**USA
JOURNAL: Nature Medicine 6 (11):p1229-1234 November, 2000

MEDIUM: print
ISSN: 1078-8956
DOCUMENT TYPE: Article
RECORD TYPE: Abstract
LANGUAGE: English
SUMMARY LANGUAGE: English

Purified *hematopoietic* stem cells can differentiate into hepatocytes in vivo.

ABSTRACT: The characterization of *hepatic* *progenitor* cells is of great scientific and clinical interest. Here we report that intravenous injection of adult bone marrow cells in the FAH-/- mouse, an animal model of tyrosinemia type I, rescued the mouse and restored the biochemical function of its liver. Moreover, within bone marrow, only rigorously purified *hematopoietic* stem cells gave rise to donor-derived *hematopoietic* and *hepatic* regeneration. This result seems to contradict the conventional assumptions of the germ layer origins of tissues such as the liver, and raises the question of whether the cells of the *hematopoietic* stem cell phenotype are pluripotent *hematopoietic* cells that retain the ability to transdifferentiate, or whether they are more primitive multipotent cells.
DESCRIPTORS:
...ORGANISMS: PARTS ETC: *hematopoietic* stem cells...

...*hepatic* *progenitor* cells
METHODS & EQUIPMENT: cellular *purification*--*purification* method

6/3,K/12 (Item 7 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)

11745699 BIOSIS NO.: 199800526395
***Isolation* of *liver* *progenitor* cells using the haemopoietic stem cell marker AC133.**
AUTHOR: Plevris J N; Nelson L J; Dollinger M M; Hayes P C
AUTHOR ADDRESS: Liver Cell Biol. Lab., Dep. Med., Royal Infirmary, Univ. Edinburgh, Edinburgh**UK
JOURNAL: Hepatology 28 (4 PART 2):p522A Oct., 1998
CONFERENCE/MEETING: Biennial Scientific Meeting of the International Association for the Study of the Liver and the 49th Annual Meeting and Postgraduate Courses of the American Association for the Study of Liver Diseases Chicago, Illinois, USA November 4-10, 1998
SPONSOR: International Association for the Study of the Liver
ISSN: 0270-9139
RECORD TYPE: Citation
LANGUAGE: English

***Isolation* of *liver* *progenitor* cells using the haemopoietic stem cell marker AC133.**
DESCRIPTORS:
ORGANISMS: PARTS ETC: *liver* *progenitor* cells...
...digestive system, *isolation*
CHEMICALS & BIOCHEMICALS: *hemopoietic* stem cell marker AC133

6/3,K/13 (Item 8 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)

09258653 BIOSIS NO.: 199497267023
Characterization and enrichment of fetal rat hepatoblasts by immunoadsorption ("Panning") and fluorescence-activated cell sorting.
AUTHOR: Sigal Samuel H; Brill Shlomo; Reid Lola M(a); Zvibel Isabel; Gupta Sanjeev; Hixson Douglas; Faris Ronald; Holst Patricia A

AUTHOR ADDRESS: (a)601 Cha[redacted]n Cancer Cent., 1300 Morris Par[redacted]ve., Bronx, NY 10461**USA
JOURNAL: Hepatology 19 (4):p999-1006 1994
ISSN: 0270-9139
DOCUMENT TYPE: Article
RECORD TYPE: Abstract
LANGUAGE: English

...ABSTRACT: of embryonic age day 15, 3.2% +- 1.3% and 2.5% +- 0.7% cells expressed albumin and alpha-fetoprotein, respectively. The remainder exhibited a *hemopoietic*, endothelial or stromal cell phenotype. Cells were panned first with an antibody to red blood cells to remove erythroid cells and then with monoclonal antibodies OX-43/OX-44 to remove *hemopoietic* and endothelial cells. This procedure eliminated 84% of fetal *hepatic* cells, with enrichment of the remainder for albumin or alpha-fetoprotein expression (up to sixfold increase). Flow cytometric analysis of unlabeled cells revealed two populations, which differed in granularity and autofluorescence. After panning, fluorescence-activated cell sorting for agranular cells yielded OX-43/44-positive cells that were essentially all *hemopoietic* precursor cells or OX-43/44-negative cells that were mostly *hemopoietic* precursor cells, along with 3.0% +- 0.7% alpha-fetoprotein-positive cells. In contrast, sorting for granular, OX-43/44-negative cells enriched for predominantly...

...75.1% +- 4.7%). Multiparametric flow cytometric analysis of the expression of an oval cell antigen, OC.3, which is a bile duct and putative *liver* *stem* *cell* marker, showed that most OC.3-positive cells coexpressed OX-43/OX-44 and morphologically were *hemopoietic* precursor cells. However, approximately 30% of the OX-43/44-negative, granular cells expressed OC.3. Although the physiological significance of OC.3positive hepatoblasts remains...

...fluorescence-activated cell sorting should facilitate further studies. In addition, because panning alone produced significantly enriched populations of fetal hepatoblasts, applications not requiring further cell *purification* could be performed with this simple technique.
MISCELLANEOUS TERMS: ...*PURIFICATION* METHOD

6/3,K/14 (Item 1 from file: 73)
DIALOG(R)File 73:EMBASE

11474016 EMBASE No: 2002045548
Derivation, characterization, and phenotypic variation of *hepatic* *progenitor* cell lines isolated from adult rats
Yin L.; Sun M.; Ilic Z.; Leffert H.L.; Sell S.
Dr. S. Sell, Department of Pathology, Laboratory of Medicine, Albany Medical College, 47 New Scotland Ave., Albany, NY 12208 United States
AUTHOR EMAIL: sells@mail.amc.edu
Hepatology (HEPATOLOGY) (United States) 2002, 35/2 (315-324)
CODEN: HPTLD ISSN: 0270-9139
DOCUMENT TYPE: Journal ; Article
LANGUAGE: ENGLISH SUMMARY LANGUAGE: ENGLISH
NUMBER OF REFERENCES: 50

Derivation, characterization, and phenotypic variation of *hepatic* *progenitor* cell lines isolated from adult rats

Liver *progenitor* cells (LPCs) cloned from adult rat livers following allyl alcohol injury express *hematopoietic* stem cell and early *hepatic* lineage markers when cultured on feeder layers; under these conditions, neither mature hepatocyte nor bile duct, Ito, stellate, Kupffer cell, or macrophage markers are detected...
MEDICAL DESCRIPTORS:
*phenotype; *precursor cell; *cell *isolation*; *liver cell; *liver injury

--etiology--et
hematopoietic stem cell; liver cell culture; Ito cell; Kupffer cell; aneuploidy; cell structure; cell population; cell differentiation; cell size; liver carcinogenesis; gene therapy; bioreactor; pathogenesis; antibody...

6/3,K/15 (Item 2 from file: 73)
DIALOG(R)File 73:EMBASE

11451253 EMBASE No: 2002023800
***Hepatic* progenitors and strategies for liver cell therapies**
Susick R.; Moss N.; Kubota H.; Lecluyse E.; Hamilton G.; Luntz T.; Ludlow J.; Fair J.; Gerber D.; Bergstrand K.; White J.; Bruce A.; Drury O.; Gupta S.; Reid L.M.
L.M. Reid, 116 Glaxo Building, Campus Box 7038, UNC School of Medicine, Chapel Hill, NC 27599 United States
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Annals of the New York Academy of Sciences (ANN. NEW YORK ACAD. SCI.) (United States) 2001, 944/- (398-419)
CODEN: ANYAA ISSN: 0077-8923
DOCUMENT TYPE: Journal ; Conference Paper
LANGUAGE: ENGLISH SUMMARY LANGUAGE: ENGLISH
NUMBER OF REFERENCES: 120

***Hepatic* progenitors and strategies for liver cell therapies**

...cell therapies, including liver cell transplantation and bioartificial livers, are being developed as alternatives to whole liver transplantation for some patients with severe liver dysfunction. *Hepatic* progenitors are proposed as ideal cells for use in these liver cell therapies given their ability to expand extensively, differentiate into all mature liver cells, have minimal immunogenicity, be cryopreservable, and reconstitute liver tissue when transplanted. We summarize our ongoing efforts to develop clinical programs of *hepatic* *progenitor* cell therapies with a focus on *hepatic* *stem* *cell* biology and strategies that have emerged in analyzing that biology.
MEDICAL DESCRIPTORS:
stem cell transplantation; liver dysfunction; cell differentiation; cryopreservation; immunogenicity; antigenicity; *purification*; liver development; liver regeneration; embryo development; human; human cell; conference paper

6/3,K/16 (Item 3 from file: 73)
DIALOG(R)File 73:EMBASE

10858271 EMBASE No: 2000339640
Identification of differentially expressed genes in epithelial stem/progenitor cells of fetal rat liver
Petkov P.M.; Kim K.; Sandhu J.; Shafritz D.A.; Dabeva M.D.
M.D. Dabeva, Marion Bessin Liver Research Center, Albert Einstein College of Medicine, 1300 Morris Park Avenue, Bronx, NY 10461 United States
AUTHOR EMAIL: dabeva@aecom.yu.edu
Genomics (GENOMICS) (United States) 01 SEP 2000, 68/2 (197-209)
CODEN: GNMCE ISSN: 0888-7543
DOCUMENT TYPE: Journal; Article
LANGUAGE: ENGLISH SUMMARY LANGUAGE: ENGLISH
NUMBER OF REFERENCES: 59

...organs, fetal liver, liver regeneration models, and gut epithelial progenitor cell lines, the subtracted clones presented in this work were placed into four categories: (1) *hepatoblast*-specific genes; (2) *hematopoietic* cell-specific genes; (3) genes expressed in hepatoblasts,

in *hematopoietic* cells, [redacted] at varying levels in other ti es; and (4) genes overexpressed in fetal liver, in models of activation of *liver* *progenitor* cells, and in epithelial progenitor cell lines. *Hepatoblast* -specific clones and those representing genes induced during liver regeneration are under further study to define their specific function(s) in liver cell growth control...
MEDICAL DESCRIPTORS:
*gene *isolation*; *genetic screening; *liver cell; *precursor cell; * nucleotide sequence
gene expression; expressed sequence tag; gene; liver development; liver regeneration; cell growth; cell differentiation; molecular cloning; *hematopoietic* cell; nonhuman; rat; animal cell; article; priority journal

6/3,K/17 (Item 4 from file: 73)
DIALOG(R)File 73:EMBASE

07582963 EMBASE No: 1999072794
Expansion conditions for early *hepatic* *progenitor* cells from embryonal and neonatal rat livers
Brill S.; Zvibel I.; Reid L.M.
Dr. S. Brill, Gastroenterology Institute, Tel Aviv Sourasky Medical Center, Weizmann 6, Tel Aviv Israel
Digestive Diseases and Sciences (DIG. DIS. SCI.) (United States) 1999 , 44/2 (364-371)
CODEN: DDSCD ISSN: 0163-2116
DOCUMENT TYPE: Journal; Article
LANGUAGE: ENGLISH SUMMARY LANGUAGE: ENGLISH
NUMBER OF REFERENCES: 32

Expansion conditions for early *hepatic* *progenitor* cells from embryonal and neonatal rat livers

...by using cell suspensions depleted of red blood cells and by culturing the cells in hormonally defined medium containing dimethyl sulfoxide. Two distinct populations of *hepatic* *progenitor* cells were evident in the cultures, based on morphology, proliferative ability, and liver-specific gene expression. Most colonies consisted of immature *hepatic* progenitors: small, blastlike cells, weakly expressing alpha-fetoprotein, albumin, and gamma- glutamyltranspeptidase, and showing evidence of proliferation as measured by bromodeoxyuridine incorporation. At the perimeter of these colonies of immature cells and forming some colonies by themselves were more mature *hepatic* *progenitor* cells: larger cells, with increased cytoplasmic to nuclear ratios, little proliferation, and strongly expressing albumin, alpha- fetoprotein, and gamma-glutamyltranspeptidase. The latter two proteins were...

...membranes of these cells. Glycogen deposits were present in the mature cells from day 14 embryos after eight days of culture. Thus, DMSO treatment of *hepatic* parenchymal progenitors provides a novel system for studies of liver development.
MEDICAL DESCRIPTORS:
precursor cell; cell culture; cell proliferation; gene expression; cell *isolation*; nonhuman; rat; animal cell; article; priority journal

6/3,K/18 (Item 5 from file: 73)
DIALOG(R)File 73:EMBASE

06768691 EMBASE No: 1997050184
Selective bipotential differentiation of mouse embryonic hepatoblasts in vitro
Rogler L.E.
Dr. L.E. Rogler, Marion Bession Liver Center, Department of Medicine,

Albert Einstein College Medicine, 1300 Morris Park Ave[illegible]e, Bronx, NY 10461 United States
American Journal of Pathology (AM. J. PATHOL.) (United States) 1997, 150/2 (591-602)
CODEN: AJPAA ISSN: 0002-9440
DOCUMENT TYPE: Journal; Article
LANGUAGE: ENGLISH SUMMARY LANGUAGE: ENGLISH
NUMBER OF REFERENCES: 41

A line of *hepatic* endoderm cells, *hepatoblast* cellline 3 (HBC-3), was derived from the liver diverticulum of the mouse on day 9.5 of gestation by culture on a mitomycin C treated STONsup + feeder layer in a *hepatoblast* culture medium consisting of Dulbecco's modified Eagle's medium, nonessential amino acids, fetal calf serum, and beta-mercaptoethanol. This line, HBC-3, stains positively for alpha-fetoprotetn, albumin, and cytokeratin 14 (CK-14), protein markers expressed by the embryonic liver diverticulum, indicating that HBC-3 cells retain an undifferentiated *hepatoblast* phenotype. HBC-3 cells acquire hepatocyte-like ultrastructural characteristics, including bile canaliculi, peroxisomes, and glycogen granules, when maintained to culture for 3 weeks without passage...
MEDICAL DESCRIPTORS:
amino acid sequence; animal cell; animal experiment; animal model; article; cell *isolation*; electron microscopy; embryo development; histochemistry; immunofluorescence; immunohistochemistry; liver development; mouse; nonhuman; pregnancy; priority journal

6/3,K/19 (Item 6 from file: 73)
DIALOG(R)File 73:EMBASE
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06336317 EMBASE No: 1995368113
Phenotype and regulation of *hepatic* *progenitor* cells versus mature liver cells
Brill S.; Sigal S.; Zvibel I.; Holst P.; Fiorino A.; Reid L.M.
Department of Physiology, CGIBD, UNC School of Medicine, Chapel Hill, NC 27514 United States
Advanced Drug Delivery Reviews (ADV. DRUG DELIV. REV.) (Netherlands) 1995, 17/3 (273-277)
CODEN: ADDRE ISSN: 0169-409X
DOCUMENT TYPE: Journal; Conference Paper
LANGUAGE: ENGLISH SUMMARY LANGUAGE: ENGLISH

Phenotype and regulation of *hepatic* *progenitor* cells versus mature liver cells
MEDICAL DESCRIPTORS:
animal cell; cell differentiation; cell *isolation*; cell line; cell maturation; cell transformation; conference paper; extracellular matrix; genetic transcription; human; human cell; nonhuman; phenotype; priority journal; regulatory mechanism
?ds

Set	Items	Description
S1	349	(LIVER OR HEPATIC) (W) (PROGENITOR OR (STEM (W) CELL))
S2	56	(HEPATOBLAST)
S3	398	S1 OR S2
S4	257	S3 AND (HEPATIC OR MESENCHYMAL OR HEMATOPOIETIC OR HEMOPOIETIC)
S5	24	S4 AND (ISOLATION OR PURIFICATION)
S6	19	RD (unique items)

?s s3 and (cell (w) transplantation)

398	S3
5658142	CELL
1192855	TRANSPLANTATION
35046	CELL(W)TRANSPLANTATION

```
      S7       36  S3 AND    LL (W) TRANSPLANTATION)
?s s7 and (treatment or therapy)
             36  S7
        3725881  TREATMENT
        4319742  THERAPY
      S8       19  S7 AND (TREATMENT OR THERAPY)
?rd
...completed examining records
      S9       12  RD (unique items)
?t s9/3,k/all
```

9/3,K/1 (Item 1 from file: 155)
DIALOG(R)File 155:MEDLINE(R)

11808226 21554782 PMID: 11698269

Peripheral blood stem cell versus bone marrow allotransplantation: does the source of hematopoietic stem cells matter?

Korbling M; Anderlini P; Hematology T A

Department of Blood and Marrow Transplantation, University of Texas MD Anderson Cancer Center, Houston.

Blood (United States) Nov 15 2001, 98 (10) p2900-8, ISSN 0006-4971 Journal Code: A8G

Languages: ENGLISH

Document type: Journal Article

Record type: In Process

Hematopoietic stem cells from 4 different sources have been or are being used for the reconstitution of lymphohematopoietic function after myeloablative, near-myeloablative, or nonmyeloablative *treatment*. Bone marrow (BM)-derived stem cells, introduced by E. D. Thomas in 1963,(1) are considered the classical stem cell source. Fetal *liver* stem *cell* *transplantation* has been performed on a limited number of patients with aplastic anemia or acute leukemia, but only transient engraftment has been demonstrated.(2) Peripheral blood...

9/3,K/2 (Item 2 from file: 155)
DIALOG(R)File 155:MEDLINE(R)

10944492 20568706 PMID: 11118315

Hepatocyte growth factor induces differentiation of adult rat bone marrow cells into a hepatocyte lineage in vitro.

Oh SH; Miyazaki M; Kouchi H; Inoue Y; Sakaguchi M; Tsuji T; Shima N; Higashio K; Namba M

Department of Cell Biology, Institute of Molecular and Cellular Biology, Okayama University Medical School, 2-5-1 Shikata-cho, Okayama, 700-8558, Japan.

Biochemical and biophysical research communications (UNITED STATES) Dec 20 2000, 279 (2) p500-4, ISSN 0006-291X Journal Code: 9Y8

Languages: ENGLISH

Document type: Journal Article

Record type: Completed

Bone marrow (BM) cells originally include alpha-fetoprotein (AFP)- and c-Met [a receptor for hepatocyte growth factor (HGF)]-expressing cells. In vitro *treatment* of BM cells with HGF induced albumin-expressing hepatocyte-like cells. Furthermore, those hepatocyte-like cells expressed cytokeratins 8 and 18, which are typically expressed in normal adult hepatocytes. These findings demonstrate that BM cells include AFP-expressing *hepatic* *progenitor* cells that can be differentiated into hepatocytes by HGF in culture, indicating that such cultures are useful resources for *cell* *transplantation* *therapy* for liver diseases.

9/3,K/3 (Item 3 from file: 155)

DIALOG(R)File 155:MEDLINE(

10873612 20517631 PMID: 11062533
Purified hematopoietic stem cells can differentiate into hepatocytes in vivo.
Lagasse E; Connors H; Al-Dhalimy M; Reitsma M; Dohse M; Osborne L; Wang X ; Finegold M; Weissman IL; Grompe M
StemCells, 525 Del Rey Avenue, Suite C, Sunnyvale, California 94085, USA. elagasse@stemcell.net
Nature medicine (UNITED STATES) Nov 2000, 6 (11) p1229-34, ISSN 1078-8956 Journal Code: CG5
Comment in Nat Med. 2000 Nov;6(11) 1212-3
Languages: ENGLISH
Document type: Journal Article
Record type: Completed

The characterization of *hepatic* *progenitor* cells is of great scientific and clinical interest. Here we report that intravenous injection of adult bone marrow cells in the FAH(-/-) mouse, an animal...
Descriptors: Cell Differentiation; **Cell* *Transplantation*; *Hematopoietic Stem Cells--cytology--CY; *Hepatocytes--cytology--CY; *Hydrolases--deficiency--DF; *Liver--pathology--PA; *Liver Regeneration; *Tyrosinemias--*therapy*--TH

9/3,K/4 (Item 4 from file: 155)
DIALOG(R)File 155:MEDLINE(R)

09559051 97249599 PMID: 9095485
Liver regeneration: prospects for *therapy* based on new technologies.
Kay MA; Fausto N
Department of Medicine, University of Washington, Seattle 98195-7720, USA. mkay@u.washington.edu
Molecular medicine today (ENGLAND) Mar 1997, 3 (3) p108-15, ISSN 1357-4310 Journal Code: CMK
Languages: ENGLISH
Document type: Journal Article; Review; Review, Tutorial
Record type: Completed

Liver regeneration: prospects for *therapy* based on new technologies.
... The differentiated parenchymal cells, which do not normally divide, can undergo multiple rounds of cellular division. This brings into question the exact role of the *liver* *stem*-*cell*, which has not been fully characterized. The knowledge gained from the dissection of the basic molecular and cellular events that occur during hepatic regeneration will ...

... or genetic deficiencies. This article reviews the basic principles of liver regeneration, experimental manipulations in animal models, and human clinical applications including cellular transplantation, gene *therapy* and artificial livers.
; Artificial Organs; *Cell* *Transplantation*; Cytokines--physiology--PH; Gene Expression Regulation; Gene *Therapy*--methods--MT; Growth Substances --physiology--PH; Hepatectomy--methods--MT; Liver--cytology--CY; Liver Diseases--chemically induced--CI; Liver Diseases--pathology--PA; Liver Diseases--surgery--SU; Liver Diseases--*therapy*--TH; Liver Transplantation--methods--MT; Rats; Stem Cells--cytology--CY; Transcription Factors --physiology--PH

9/3,K/5 (Item 5 from file: 155)
DIALOG(R)File 155:MEDLINE(R)

08930622 96295654 PMID: 8679101
Stem cells from bone marrow, umbilical cord blood and peripheral blood for clinical application: current status and future application.

Lu L; Shen RN; Broxmey[redacted]HE
Department of Medicine (Hematology/Oncology), Indiana University School of Medicine, Indianapolis 46202-5121, USA.
Critical reviews in oncology/hematology (IRELAND) Mar 1996, 22 (2) p61-78, ISSN 1040-8428 Journal Code: AGO
Contract/Grant No.: R01 CA HL46549, CA, NCI; R01 HL 49202, HL, NHLBI; R37 CA 36464, CA, NCI
Languages: ENGLISH
Document type: Journal Article; Review; Review, Academic
Record type: Completed

Bone marrow transplantation (BMT) has progressed rapidly during the past two decades to that of a *treatment* of choice as a therapeutically effective modality for the *treatment* of selected patients with malignant disease and non-malignant hematological disorders. However, its use is limited by availability of human leukocyte antigens (HLA)-matched donor...

...human stem cells from different tissue sources. Discussed in this review are: (a) stem cell purification, characterization and ex vivo expansion; (b) bone marrow stem *cell* *transplantation*; (c) cord blood stem *cell* *transplantation*; (d) peripheral blood stem *cell* *transplantation*; (e) fetal *liver* stem *cell* *transplantation*; (f) in utero stem *cell* *transplantation* ; and (g) evaluation of the capacity of stem cells to serve as targets for gene *therapy*.

9/3,K/6 (Item 6 from file: 155)
DIALOG(R)File 155:MEDLINE(R)

07859487 93195031 PMID: 8450037
Chimerism and tolerance to host and donor in severe combined immunodeficiencies transplanted with fetal liver stem cells.
Bacchetta R; Vandekerckhove BA; Touraine JL; Bigler M; Martino S; Gebuhrer L; de Vries JE; Spits H; Roncarolo MG
Human Immunology Department, DNAX Research Institute, Palo Alto, California 94304.
Journal of clinical investigation (UNITED STATES) Mar 1993, 91 (3) p1067-78, ISSN 0021-9738 Journal Code: HS7
Languages: ENGLISH
Document type: Journal Article
Record type: Completed

... studied the peripheral T cell repertoire of two patients with severe combined immunodeficiency who were successfully treated with human histocompatibility leukocyte antigen (HLA)-mismatched fetal *liver* stem *cell* *transplantation*. The patients presented a split chimerism. T cells were of donor origin, whereas the B cells/monocytes were of the host phenotype. Interestingly, the natural...

...no donor-reactive CD8+ T cells or host or donor-reactive TCR gamma delta + T cells were detected. These data indicate that, after fetal stem *cell* *transplantation*, donor-reactive, but not host-reactive cells, are deleted from the T cell repertoire. Therefore, a peripheral mechanism of suppression or clonal anergy, rather than...
; Adolescence; Cell Line; Child, Preschool; Chimera--immunology--IM; Cytotoxicity, Immunologic; HLA Antigens--analysis--AN; Histocompatibility Testing; IgA--blood--BL; IgG--blood--BL; Immunologic Deficiency Syndromes--*therapy*--TH; Immunophenotyping; Liver Transplantation--immunology--IM; Receptors, Antigen, T-Cell, gamma-delta--immunology--IM; Stem Cells --immunology--IM; T-Lymphocyte Subsets--immunology--IM

9/3,K/7 (Item 7 from file: 155)
DIALOG(R)File 155:MEDLINE(R)

06928667 92370096 PMID: 1354521

T cell repertoire and tolerance after fetal stem *cell* *transplantation*

Roncarolo MG; Bacchetta R
DNAX Research Institute, Palo Alto, CA 94304.
Bone marrow transplantation (ENGLAND) 1992, 9 Suppl 1 p127-8, ISSN 0268-3369 Journal Code: BON
Languages: ENGLISH
Document type: Journal Article
Record type: Completed

T cell repertoire and tolerance after fetal stem *cell* *transplantation*

... CD4+ host-reactive T cell clones. Our data demonstrate that host-reactive cells are not deleted from the donor T cell repertoire following allogenic fetal *liver* stem *cell* *transplantation*. Therefore, in vivo tolerance between the host and the donor is maintained by a peripheral autoregulatory mechanism in which cytokines may play a role.
Descriptors: Fetal Tissue Transplantation--immunology--IM; *Hematopoietic Stem *Cell* *Transplantation*; *Hematopoietic Stem Cells--transplantation --TR; *Immune Tolerance; *Severe Combined Immunodeficiency--*therapy*--TH; *T-Lymphocyte Subsets

9/3,K/8 (Item 1 from file: 73)
DIALOG(R)File 73:EMBASE
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11401037 EMBASE No: 2001415524
Update on hepatic stem cells
Alison M.R.; Poulsom R.; Forbes S.J.
M.R. Alison, Department of Histopathology, Du Cane Road, London W12 0NN United Kingdom
AUTHOR EMAIL: m.alison@ic.ac.uk
Liver (LIVER) (Denmark) 2001, 21/6 (367-373)
CODEN: LIVED ISSN: 0106-9543
DOCUMENT TYPE: Journal ; Review
LANGUAGE: ENGLISH SUMMARY LANGUAGE: ENGLISH
NUMBER OF REFERENCES: 46

...of hereditary tyrosinaemia. How these three stem cell populations integrate to achieve a homeostatic balance is not understood. This review focuses on three aspects of *liver* *stem* *cell* biology: 1) the *hepatic* *stem* *cell* candidates; 2) models of *cell* *transplantation* into the liver; and 3) the therapeutic potential of hepatic stem cells.
MEDICAL DESCRIPTORS:
*liver disease--*therapy*--th; *stem *cell* *transplantation*
liver cell; stem cell; cell growth; cell loss; cell proliferation; liver resection; virus infection; hepatitis; liver regeneration; cell division; *cell* *transplantation*; cell clone; liver injury; cell activation; cell compartmentalization; cellular distribution; hepatobiliary system; epithelium cell; cell differentiation; bone marrow cell; hematopoietic stem cell; cell renewal; liver function; tyrosinemia--*therapy*--th; cell population; homeostasis; cytology; bone marrow transplantation; human; nonhuman; male; female; mouse; rat; animal experiment; animal model; controlled study; human tissue; human cell; animal...

9/3,K/9 (Item 2 from file: 73)
DIALOG(R)File 73:EMBASE
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11248311 EMBASE No: 2001262354
Liver transplantation of hepatic stem cells: Potential use for treating liver diseases
Feldmann G.
Dr. G. Feldmann, INSERM U. 327, Faculte de Medecine Xavier Bichat, 16 rue

Henri Huchard, 75018 P s France
AUTHOR EMAIL: u327@bichat.inserm.fr
Cell Biology and Toxicology (CELL BIOL. TOXICOL.) (Netherlands) 2001, 17/2 (77-85)
CODEN: CBTOE ISSN: 0742-2091
DOCUMENT TYPE: Journal ; Conference Paper
LANGUAGE: ENGLISH SUMMARY LANGUAGE: ENGLISH
NUMBER OF REFERENCES: 73

...fetal progenitor bipotential hepatic stem cells; adult hepatocytes, which can be considered as unipotential committed stem cells; and oval cells, a type of nonparenchymal pluripotential *hepatic* *stem* *cell*. The advantages and disadvantages of each type of cell are discussed and several other possible alternatives, such as the use of hematopoietic stem cells are...
MEDICAL DESCRIPTORS:
*liver transplantation; *stem *cell* *transplantation*; *liver disease--*therapy*--th
liver injury--*therapy*--th; precursor cell; hematopoietic stem cell; fetus cell; conference paper; priority journal

9/3,K/10 (Item 3 from file: 73)
DIALOG(R)File 73:EMBASE

11109747 EMBASE No: 2001123011
Expansion of hepatic and hematopoietic stem cells utilizing mouse embryonic liver explants
Monga S.P.S.; Tang Y.; Candotti F.; Rashid A.; Wildner O.; Mishra B.; Iqbal S.; Mishra L.
Dr. L. Mishra, DVAMC, 50 Irving Street, Washington, DC 2042 United States
AUTHOR EMAIL: lopamishra@yahoo.com
Cell Transplantation (CELL TRANSPLANT.) (United States) 2001, 10/1 (81-89)
CODEN: CTRAE ISSN: 0963-6897
DOCUMENT TYPE: Journal ; Article
LANGUAGE: ENGLISH SUMMARY LANGUAGE: ENGLISH
NUMBER OF REFERENCES: 40

Ex vivo embryonic liver explant culture is a novel and attractive approach to obtain abundant hepatic and hematopoietic stem cells. Gene *therapy* of autologous hepatic and hematopoietic stem cells represents an alternative therapeutic approach to liver transplantation for genetic and metabolic disorders. In this study we characterize...
...cultured under specific conditions. Modulation of growth conditions by addition of hepatocyte growth factor, Flt-3 ligand, and stem cell factor leads to enrichment of *hepatic* *progenitor* cells in embryonic liver explants. Under these conditions, we also demonstrate the role of a novel marker PRAJA-1 to identify hepatic stem cells and...
MEDICAL DESCRIPTORS:
*hematopoietic stem *cell* *transplantation*; *liver transplantation
liver cell; gene *therapy*; liver development; cell differentiation; nonhuman; mouse; controlled study; animal tissue; article; priority journal

9/3,K/11 (Item 4 from file: 73)
DIALOG(R)File 73:EMBASE

10650164 EMBASE No: 2000115146
Closing in on the elusive *liver* *stem* *cell*?
Senior K.
Molecular Medicine Today (MOL. MED. TODAY) (United Kingdom) 2000, 6/4 (137)

CODEN: MMTOF ISSN: 135[redacted]4310
DOCUMENT TYPE: Journal; Note
LANGUAGE: ENGLISH
NUMBER OF REFERENCES: 4

Closing in on the elusive *liver* *stem* *cell*?
MEDICAL DESCRIPTORS:
*liver cell; *stem *cell* *transplantation*
cell maturation; bone marrow cell; liver injury; liver transplantation; gene *therapy*; cell differentiation; donor; bone marrow transplantation; nonhuman; mouse; animal experiment; animal tissue; animal cell; note

9/3,K/12 (Item 5 from file: 73)
DIALOG(R)File 73:EMBASE

06982780 EMBASE No: 1997268254
Immunological tolerance following stem *cell* *transplantation* in human fetuses in utero
Touraine J.-L.; Raudrant D.; Laplace S.; Roncarolo M.G.
Dr. J.-L. Touraine, Transplantation/CLD, Pav P Hopital E. Herriot, 69437 Lyon Cedex 03 France
Transplantation Proceedings (TRANSPLANT. PROC.) (United States) 1997, 29/5 (2477)
CODEN: TRPPA ISSN: 0041-1345
PUBLISHER ITEM IDENTIFIER: S0041134597004557
DOCUMENT TYPE: Journal; Conference Paper
LANGUAGE: ENGLISH
NUMBER OF REFERENCES: 3

Immunological tolerance following stem *cell* *transplantation* in human fetuses in utero
MEDICAL DESCRIPTORS:
*fetus *liver*; *stem *cell* *transplantation*
clinical article; conference paper; fetus; human; human cell; immune deficiency; immunological tolerance; niemann pick disease; priority journal ; thalassemia major--*therapy*--th; *treatment* outcome
?ds

Set	Items	Description
S1	349	(LIVER OR HEPATIC) (W) (PROGENITOR OR (STEM (W) CELL))
S2	56	(HEPATOBLAST)
S3	398	S1 OR S2
S4	257	S3 AND (HEPATIC OR MESENCHYMAL OR HEMATOPOIETIC OR HEMOPOIETIC)
S5	24	S4 AND (ISOLATION OR PURIFICATION)
S6	19	RD (unique items)
S7	36	S3 AND (CELL (W) TRANSPLANTATION)
S8	19	S7 AND (TREATMENT OR THERAPY)
S9	12	RD (unique items)

?s (s3 or s4) and review

	398	S3
	257	S4
	1216336	REVIEW
S10	24	(S3 OR S4) AND REVIEW

?rd
...completed examining records

S11	17	RD (unique items)

?s s11 and ((hepatic or liver) (w) (disease or disorder))

	17	S11
	373314	HEPATIC
	1348812	LIVER
	4334980	DISEASE
	633835	DISORDER
	77278	(HEPATIC OR LIVER)(W)(DISEASE OR DISORDER)

S12 4 S11 AND EPATIC OR LIVER) (W) (DISEASE DISORDER))
?t s12/3,k/all

12/3,K/1 (Item 1 from file: 73)
DIALOG(R)File 73:EMBASE

10925315 EMBASE No: 1998085078
Liver regeneration: Prospects for therapy based on new technologies
Kay M.A.; Fausto N.
Dr. M.A. Kay, Division of Medical Genetics, Department of Medicine, University of Washington, Seattle, WA 98195-7720 United States
AUTHOR EMAIL: mkay@u.washington.edu
Molecular Medicine Today (MOL. MED. TODAY) (United Kingdom) 1997, 3/3 (108-115)
CODEN: MMTOF ISSN: 1357-4310
PUBLISHER ITEM IDENTIFIER: S1357431096100629
DOCUMENT TYPE: Journal; Review
LANGUAGE: ENGLISH SUMMARY LANGUAGE: ENGLISH
NUMBER OF REFERENCES: 49

...The differentiated parenchymal cells, which do not normally divide, can undergo multiple rounds of cellular division. This brings into question the exact role of the *liver* *stem*-*cell*, which has not been fully characterized. The knowledge gained from the dissection of the basic molecular and cellular events that occur during *hepatic* regeneration will be useful for advancing therapeutic interventions for individuals with *liver* *disease* or genetic deficiencies. This article reviews the basic principles of liver regeneration, experimental manipulations in animal models, and human clinical applications including cellular transplantation, gene...
MEDICAL DESCRIPTORS:
*liver regeneration; **liver* *disease*--therapy--th; *genetic disorder --therapy--th
human; stem cell; molecular biology; gene therapy; cell transplantation; artificial liver; *review*

12/3,K/2 (Item 2 from file: 73)
DIALOG(R)File 73:EMBASE

07508178 EMBASE No: 1998399953
Ductular reaction and its diagnostic significance
Roskams T.; Desmet V.
Dr. T. Roskams, Department of Pathology, University of Leuven, Minderbroederstraat 12, B-3000 Leuven Belgium
Seminars in Diagnostic Pathology (SEMIN. DIAGN. PATHOL.) (United States) 1998, 15/4 (259-269)
CODEN: SDPAE ISSN: 0740-2570
DOCUMENT TYPE: Journal; Review
LANGUAGE: ENGLISH SUMMARY LANGUAGE: ENGLISH
NUMBER OF REFERENCES: 79

...such as acute and chronic cholestasis and variable degrees of parenchymal necrosis. Ductular reaction has gained new interest because of its relationship with putative human *liver* *progenitor* cells. The existence of progenitor cells in a quiescent organ such as the liver, although still controversial, is important for the understanding of biological processes...
MEDICAL DESCRIPTORS:
**liver* *disease*--diagnosis--di
histopathology; *hepatic* duct; liver parenchyma; cholestasis; liver necrosis; human; *review*; priority journal

12/3,K/3 (Item 3 from file: 73)
DIALOG(R)File 73:EMBASE

06525555 EMBASE No: 1996190922
***Hepatic* regeneration: The role of regeneration in pathogenesis of chronic liver diseases**
Bisgaard H.C.; Thorgeirsson S.S.
Dept. of Life Sciences and Chemistry, Roskilde University, Marbjergvej 35,DK-4000 Roskilde Denmark
Clinics in Laboratory Medicine (CLIN. LAB. MED.) (United States) 1996, 16/2 (325-339)
CODEN: CLMED ISSN: 0272-2712
DOCUMENT TYPE: Journal; Review
LANGUAGE: ENGLISH SUMMARY LANGUAGE: ENGLISH

***Hepatic* regeneration: The role of regeneration in pathogenesis of chronic liver diseases**

Hepatic necrosis is a common reaction to liver injury of various etiologies. The response is regeneration. As reviewed earlier, reconstitution of liver mass may proceed via...

...entry of surviving, functionally intact differentiated liver cells into the cell cycle, where they may remain for several rounds of replication, and (2) recruitment of *hepatic* *progenitor* cells, whereby the liver mass is replaced by extensive proliferation and differentiation of more primitive cell types. Although both mechanisms appear to share a number...
MEDICAL DESCRIPTORS:
*chronic *liver* *disease*; *liver regeneration
epithelium cell; extracellular matrix; kupffer cell; liver cirrhosis; liver parenchyma; mitosis; nonhuman; pathogenesis; priority journal; *review*; tissue repair

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Ductular hepatocytes
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Ductular hepatocytes are observed in the livers of both experimental animals and man under various conditions of severe toxin-, carcinogen- or viral-induced *hepatic* injury with prominent loss of parenchymal hepatocytes. These unique *hepatic* epithelial cells are characterized by phenotypic traits that are intermediate between those of hepatocytes and intrahepatic biliary epithelium. The origin of ductular hepatocytes is controversial...

...parenchymal hepatocytes into intrahepatic biliary epithelium, (2) a metaplastic conversion of intrahepatic bile duct or ductular epithelium into hepatocytes, or (3) differentiation of a putative *liver* *stem* *cell* along the hepatocyte lineage. Depending on the *liver* *disease* state being investigated, evidence is presented to support all three of these possibilities. Of particular interest is the increasing evidence supporting the existence of a...